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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/830,220

04/23/2004

Takuto Yoshida

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MORGAN LEWIS & BOCKIUS LLP
1111 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 20004

EXAMINER

VELEZ, ROBERTO

ART UNIT

PAPER NUMBER

2829

MAIL DATE

DELIVERY MODE

03/05/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/830,220	Applicant(s) YOSHIDA ET AL.	
	Examiner Roberto Velez	Art Unit 2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 and 6 is/are allowed.
- 6) ☒ Claim(s) 1, 5, 7 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/04, 05/06, 07/06, 02/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/05/2008 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kasukabe et al. (US Pat. 4,931,726).

Regarding claim 1, Kasukabe et al. shows (Figures 13-15a) an inspection coaxial probe, comprising: a conductive block [217], formed with a first face (face facing 218 and 227), a second face (face not facing 227) opposed to the first face and a penetration hole (formed in 217) connecting the first face and the second face; a contact probe [221], comprising: a conductive pipe [221a]; and a conductive plunger [221c], retractably provided in at a first end of the pipe [221a], and adapted to be brought into contact with a device to be inspected [214]; and a first insulative substrate [227, 218], provided on the first face of the block [217] and formed with a first recess (starting in 218 and ending in 227) and a first through hole [227a] communicated with the first recess, wherein the first end of the pipe [221a] is fitted into the first recess such that the contact probe is coaxially retained in the penetration hole and the first

through hole [227a] (as shown in Fig. 15a) and a part of an outer periphery of the pipe [221a] directly faces an interior wall of the penetration hole while forming an air gap therebetween (as shown in Fig. 15a).

Regarding claim 7, Kasukabe et al. shows (Figures 13-15a) an apparatus for inspecting an electrical characteristic of a device, the apparatus comprising: the inspection coaxial probe as set forth in claim 1; and a wiring board [219, 220], on which an inspection circuit [224, 223, 222] is provided, and to which a second end of the pipe [221a] the inspection coaxial probe [221] is electrically connected.

Regarding claim 8, Kasukabe et al. shows (Fig. 15a) wherein the contact probe [221] further comprises a spring [221b] inserted in the conductive pipe [221a] to force the conductive plunger [221c] outwardly.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 06-087874 (as cited in IDS 02/05/2008) in view of Kasukabe et al. (US Pat. 4,931,726).

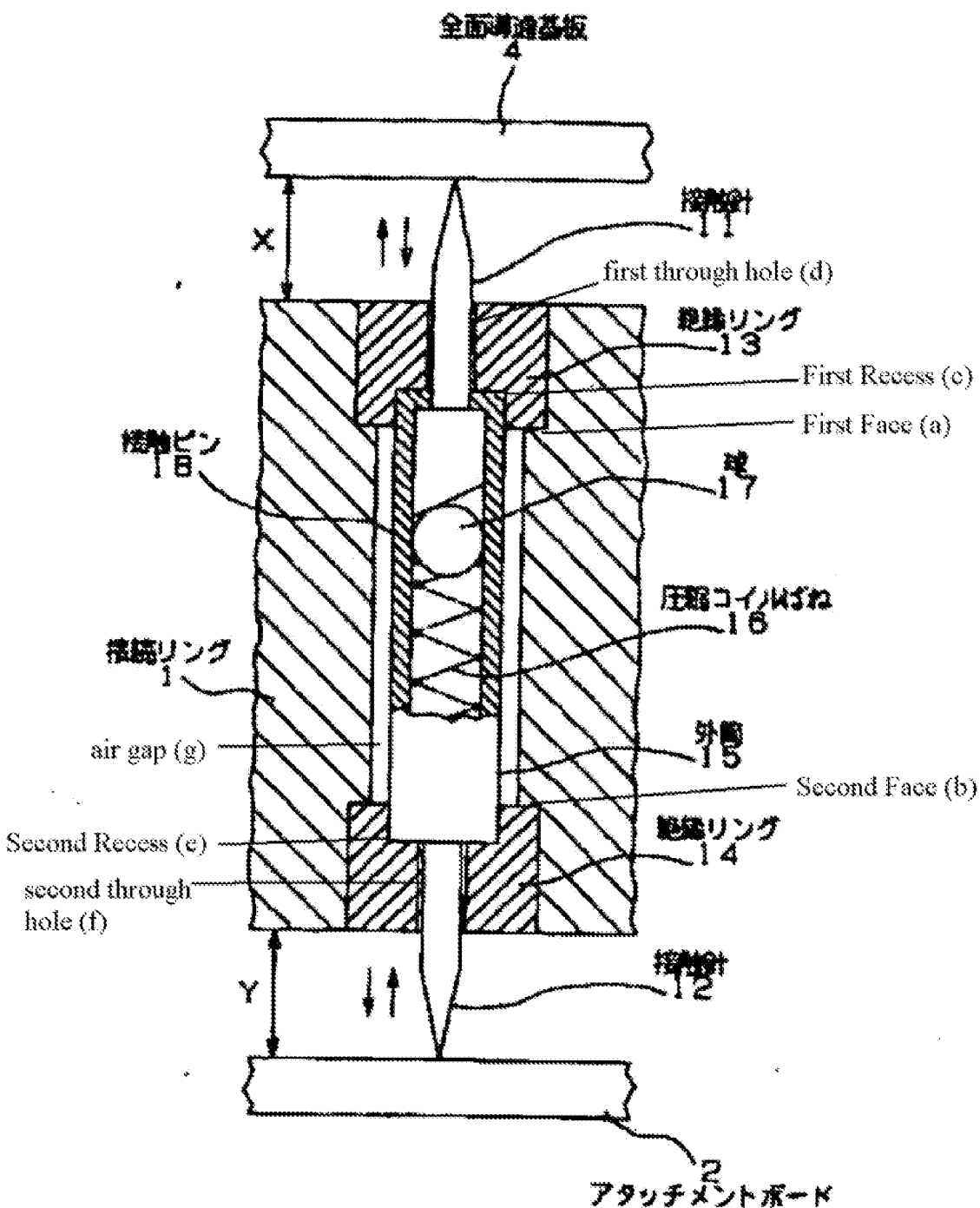
Regarding claim 1, JP 06-087874 shows (Figures 2-3) an inspection coaxial probe, comprising: a block [1], formed with a first face (a), a second face (b) opposed to the first face (a) and a penetration hole (formed between a and b) connecting the first face (a) and the second face (b); a contact probe [1B], comprising: a conductive pipe [15]; and a conductive plunger [11], retractably provided in at a first end of the pipe [15], and adapted to be brought into

contact with a device to be inspected; and a first insulative substrate [13], provided on the first face of the block and formed with a first recess (c) and a first through hole [d] communicated with the first recess [c], wherein the first end of the pipe [15] is fitted into the first recess [c] such that the contact probe [1B] is coaxially retained in the penetration hole and the first through hole [d] (as shown in Fig. 3) and a part of an outer periphery of the pipe [15] directly faces an interior wall of the penetration hole while forming an air gap [g] therebetween (as shown in Fig. 3).

JP 06-087874 fails to disclose a conductive block. However, Kasukabe et al. shows (Fig. 15a) a conductive block [217].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Kasukabe et al. into the device of JP 06-087874 by having a conductive block. The ordinary artisan would have been motivated to modify JP 06-087874 in the manner set forth above for the purpose of acting as a shield to the probe while forming a coaxial arrangement.

Notes: For reference characters (a-g), please see drawing below. Also, it has been held that the recitation that an element is “adapted to” perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.



Regarding claim 5, the combination of JP 06-087874 and Kasukabe et al. discloses everything as claimed above in claim 1; in addition, JP 06-087874 shows (Figures 2-3) a second insulative substrate [14], provided on the second face (b) of the block [1] and formed with a

second recess (e) and a second through hole (f) communicated with the second recess (e), wherein a second end of the pipe [15] is fitted into the second recess (e), such that the contact probe [1B] coaxially retained in the second through hole (f), wherein the contact probe [1B] is adapted to be electrically connected to a wiring board [30] on which an inspection circuit is provided via the second end of the pipe [15].

Notes: For reference characters (a-g), please see drawing above. Also, it has been held that the recitation that an element is “adapted to” perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

Allowable Subject Matter

6. Claims 4 and 6 are allowed.
7. The following is a statement of reasons for allowance: the prior art of record, taken alone or in combination, fails to disclose or render obvious, an inspection coaxial probe comprising: a conductive block; a first conductive plate, formed with a first recess and a first through hole communicated with the first recess and provided on the first face of the block; a contact probe; and a first insulative spacer formed with a second recess and a second through hole communicated with the second recess, wherein the first insulative spacer is inserted into the first recess; wherein the first end of the pipe is fitted into the second recess, such that the contact probe is coaxially retained in the first through hole, the second through hole and the penetration hole of the block and a part of an outer periphery of the pipe directly faces an interior wall of the penetration hole while forming an air gap therebetween; and wherein an inner diameter of the first recess is larger than an inner diameter of the penetration hole, as further recited in claim 4.
8. Claim 6 depending from claim 4 is allowed for the same reason.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Velez whose telephone number is 571-272-8597. The examiner can normally be reached on Monday-Friday 8:00am- 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ha Nguyen can be reached on 571-272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Roberto Velez
Patent Examiner

/Ha T. Nguyen/
Supervisory Patent Examiner, Art Unit 2829